

# 25 W VHF Mobile Radio-telephone (FM)

## Type DT 45–7AT

Designed and produced by the Canadian Marconi Company, Montreal, Canada



THIS EQUIPMENT – a product of the Canadian Marconi Company – is particularly suited to service in vehicles, being of efficient and compact design. The units are designed so as to permit maximum flexibility in installation and application.

Transistors are used in this equipment with the consequent reduction in power consumption.

### Features

Robust construction with all-steel case and chassis thoroughly rust-proofed.

Split case for easy removal.

High-quality voice reproduction with improved dynamic microphone.

Transistorized power unit with special heat sink.

Suitable for all 12-volt installations.

#### **EQUIPMENT**

The Type DT 45-7AT consists of a transmitter/receiver unit, a control unit and a loudspeaker unit. The main chassis may be simply withdrawn from its case by releasing two side fasteners, thus rendering servicing a simple procedure.

## Data Summary

TRANSMITTER

Frequency range: 150-172 Mc/s.

Power outputs: 25 W nominal at rated input voltage.

Frequency stability:  $\pm 0.0025\%$  over the ambient temperature range  $-30^{\circ}$ C to  $+60^{\circ}$ C, or  $\pm 0.0005\%$  dependent upon requirements.

Modulation: Phase modulator with  $\pm 15$  kc/s swing at 3 kc/s for less than 5% distortion.

Spurious emissions: At least 65 dB below carrier level.

RECEIVER

Frequency range: 150-172 Mc/s.

Sensitivity:  $0.4 \mu V$  for 12 dB signal-to-noise ratio.

Selectivity: 6 dB bandwidth greater than ±15 kc/s. 100 dB bandwidth less than

 $\pm 40$  kc/s from centre frequency. Audio output: 1 W with less than 5% distor-

Noise level: 50 dB below 1 W.
Frequency stability: As transmitter.

GENERAL

Input volts: Transmit 13·4 V
Receive 13·6 V.

Consumption: Transmit 17A at 13·4 V Receive 10·1 A at 13·6 V Standby 8 A at 13·6 V.

#### Dimensions:

Height  $6\frac{1}{4}$  in. (16 cm) Width  $16\frac{3}{4}$  in. (42 cm) Depth  $13\frac{1}{2}$  in. (34 cm) Weight 45 lb (20 kg)

## Marconi

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